



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/392,106	09/08/1999	G. MICHAEL PHILLIPS	35512-00006	9570

7590 05/27/2004

STEVEN E SHAPIRO ESQ  
MITCHELL SILBERGERG & KNUPP LL  
11377 WEST OLYMPIC BOULEVARD  
LOS ANGELES, CA 90064

EXAMINER

BASHORE, ALAIN L

ART UNIT	PAPER NUMBER
----------	--------------

3624

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/392,106

**Applicant(s)**

PHILLIPS ET AL.

**Examiner**

Alain L. Bashore

**Art Unit**

3624

My

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-26 of the claimed invention is directed to non-statutory subject matter.

The claims do not recite a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research. No indication of practical application is present for the claimed invention.

It is noted that recitation of "asset", "financial measure", or "economic measure" encompass intangible assets that may be an idea or concept per se.

3. Claims 1-26 are rejected under 35 U.S.C. 101 as non-statutory because the method claims as presented do not claim a technological basis. Without a claimed basis, the claim may be interpreted in an alternative as involving no more than a manipulation of an abstract idea and therefore non-statutory under 35 U.S.C. 101. In contrast, a method claim that includes in the preamble and body of the claim structural / functional interrelationships that are solely by computer (and non-trivial) are considered

to have a technological basis [See Ex parte Bowman, 61 USPQ2d 1669, 1671 (Bd. Pat. App. & Inter. 2001) – used only for content and reasoning since not precedential].

The recitation: “computing device” is not solely a computer.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 6-8, 11-14, 23-24, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. in view of Goertzel et al.

White, Jr. discloses a method, apparatus and computer-readable medium for predicting a value of a target variable based on predictions of other variables. There is obtained historical values for the target variable at each of plural time points (col 7, lines 12-30). Values are assigned to parameters of a forecasting model to obtain previously predicted values for the plural predictor variables to the historical values for the target variables (col 7, lines 50-55). A value of the target value is predicted, from currently predicted values for at least a subset of the plural predictor variables using the forecasting model and the values assigned to the parameters of the forecasting model

(col 10, lines 7-19). The target variable is a measure of a value of a financial asset (col 7, lines 35-49). There is obtained previously predicted values for use with currently predicted values for each plural predictor variable that is also used by the forecasting model (col 7, lines 66-67; col 8, lines 1-6).

The term "best fit" is not disclosed to White, Jr.

Since applicant does not define the term, the examiner will take the broadest meaning of the term, which is "to approximate".

It would have been obvious to one with ordinary skill in the art to include a best fit since White, Jr. teaches better performance achieved by better model performance (col 8, lines 5-6).

White, Jr. does not explicitly disclose obtaining a second set of predicted values for each of plural predictor variables, the second set of predicted values having been predicted subsequent to prediction of the first set of predicted values.

Goertzel et al discloses obtaining second predicted values, the second predicted value having been predicted subsequent to prediction of a first predicted value (col 1, lines 51-67; col 2, lines 1-10).

It would have been obvious to one with ordinary skill in the art to include obtaining a second set of predicted values for each of plural predictor variables, the second set of predicted values having been predicted subsequent to prediction of the first set of predicted values because Goertzel et al teaches statistical analysis is typical in the prior art for predictive models (col 1, lines 11-15).

6. Claims 3, 9-10, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. in view of Goertzel et al as applied to claims 1-2, 6-8, 11-14, 23-24 above, and further in view of Management Science Paper.

Claim 18-22, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. in view of Statistics Dictionary Reference as applied to claim 15 above, and further in view of Management Science Paper.

White, Jr. or in view of Goertzel et al do not disclose:

statistical curve fitting technique;

a combination forecast;

forecasts of a plurality of different individuals

Management Science Paper discloses statistical curve fitting technique (p 1116; col 1-2), combination forecasts (p 1115; col 2) and forecasts of a plurality of different individuals (p 1127-128).

It would have been obvious to one with ordinary skill in the art to include statistical curve fitting technique because Management Science Paper teaches modeling involves curve fitting techniques.

It would have been obvious to one with ordinary skill in the art to include combination forecasts because Management Science Paper teaches importance of knowing what model class is appropriate in modeling.

It would have been obvious to one with ordinary skill in the art to include forecasts of a plurality of different individuals because Management Science Paper teaches different individuals conceive of different models in the art.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. in view of Goertzel et al in view of Management Science Paper as applied to claim 3, and further in view of Statistics Dictionary Reference.

Claims 15-17, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. in view of Goertzel et al in view of Statistics Dictionary Reference.

Nether White, J., in view of Goertzel et al, nor Management Science Paper disclose a stepwise linear regression technique.

Statistics Dictionary Reference discloses a stepwise linear regression technique (see definition of "selection methods in regression" page 339-340).

It would have been obvious to one with ordinary skill in the art to utilize a stepwise linear regression technique to White, Jr. because The Dictionary Reference teaches such techniques useful when variable manipulation no longer requires the further use of certain variables in a calculation (page 340).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. in view of Goertzel et al as applied to claim 1 above, and further in view of Deco et al.

White, Jr. nor in view of Goertzel et al disclose a neural network technique.

Deco et al discloses a neural network technique (col 1, lines 55-62).

It would have been obvious to one with ordinary skill in the art to include a neural network technique because Decos et al teaches such as a training function in modeling (col 1, lines 55-56).



***Response to Arguments***

9. Applicant's arguments with respect to claims of record have been considered but are moot in view of the new ground(s) of rejection.

Regarding the 35 U.S.C 101 rejection to the argument of a real world result, applicant's rebuttal is not commensurate in scope with what is claimed. State Street discloses "final share price" - which is a real world result. The instant claims are broad to read on a non-real or intangible result.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 703-308-1884. The examiner can normally be reached on about 7:00 am to 4:30 pm (Monday thru Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alain L. Bashore